

Subject: Mathematics

Grade: Seventh

Standard: #6 Measurement

Key Concept: Students work with measurement of perimeter and area.

Generalization: Students work with the relationship between perimeter and area of shapes.

Background:

This lesson should be presented fairly early in the year. Students should be familiar with the definitions of perimeter and area.

This lesson is tiered in *content* according to *readiness*.

Tier I: ***Basic Learners***

Pairs of students are given eight squares which are a variety of colors or you could have the students make their own squares from card stock or you may already have an appropriate manipulative for the students to use. Students are given a worksheet which contains a series of questions about perimeter and area related to the eight squares. Questions about the greatest and least perimeter, greatest and least area, specific areas, and specific perimeters should be included on the worksheet. In addition, students should be asked to draw specific examples for each question.

Tier II: ***Grade Level Learners***

Pairs of students are given twelve squares which are a variety of colors or you could have the students make their own squares from card stock or you may already have an appropriate manipulative for the students to use. Students are given a worksheet which contains a series of questions about perimeter and area related to the twelve squares. Questions about the greatest and least perimeter, greatest and least area, specific areas, and specific perimeters should be included on the worksheet. In addition, students should be asked to draw

specific examples for each question.

Tier III: *Advanced Learners*

Pairs of students are given twelve hexagons which are a variety of colors or you could have the students make their own hexagons from card stock or you may already have an appropriate manipulative for the students to use. Students are given a worksheet which contains a series of questions about perimeter and area related to the use of the twelve hexagons. Questions about the greatest and least perimeter, greatest and least area, specific areas, and specific perimeters should be included on the worksheet. In addition, students should be asked to draw specific examples for each question.

Assessment:

Each worksheet should be graded accuracy.

An extension for each tier would be to ask questions which involve a greater number of their shape or pertain to another shape.